



February 2012

City Water Soon to Have Ozone Treatment Cater Water Treatment Plant Undergoes Treatment Upgrades

The City has broken ground on a \$20 million Ozone Project at the Cater Water Treatment Plant to meet upcoming Federal water treatment regulations. The Ozone Project is the culmination of many years of work to determine the best solution for complying with a more stringent Disinfection Byproduct (DBP) Rule from the US Environmental Protection Agency. Project completion is anticipated for early 2013.

The DBP Rule reduces the allowable levels of disinfection byproducts in drinking water. Disinfection byproducts are formed when chlorine, which is added to drinking water for disinfection, reacts with naturally occurring dissolved organic material in the water.

Ozone has been used in water treatment for over 100 years. It is commonly used in Europe and its popularity is spreading throughout the United States, as conventional filtration processes cannot always address the increasingly more stringent drinking water rules and regulations.

Ozone is generated by using electricity and liquid oxygen to convert oxygen, which has two oxygen molecules, to ozone, which has three oxygen molecules. By injecting ozone into the water during the pre-treatment stage of the water treatment process, the naturally occurring dissolved organic material becomes more amenable to being filtered out during the treatment process. As a result, the drinking water that leaves the treatment plant has lower levels of dissolved organic material for the chlorine to react with, which results in lower levels of DBPs in the City's drinking water for compliance with the new Federal drinking water rule.